

FCC/SAR Hotspot Power Back Off implementation in PY7PM-0140

This document is regarding the power back off implementation in PY7PM-0140 during WLAN Hotspot mode for SAR measurement.

When Hotspot mode is activated, an automatic RF power reduction is done according to below (see also details in table below):

- The maximum output power in UMTS Band 2 [1850 - 1910 MHz] will not exceed 23.5 dBm and in UMTS Band 4 [1710 - 1755 MHz] maximum output power will not exceed 22 dBm.
- The maximum output power in LTE Band 2 [1850 - 1910 MHz] will not exceed 23 dBm, and in LTE Band 4 [1710 - 1755 MHz] maximum output power will not exceed 23.2 dBm.

When WiFi Hotspot mode is deactivated, the RF output power levels return to their normal RF power level.

When hotspot mode is activated, the following additional scenarios may occur:

1. A call established (incoming call or outgoing call);
RF output power level will return to normal RF power level. Any cellular network data transmission is stopped or suspended during active voice calls.
2. Automatic RF power control will remain active under the following network operational changes:
 - a. The Received Signal Strength (RSSI) is decreasing.
 - b. The mobile network requests higher RF power from the terminal.
 - c. The network setting changes to a different network (roaming between networks)

Power Reduction Values

Band	Max RF power during hotspot
UMTS Band 2 HSDPA1	≤ 23.5 dBm
UMTS Band 2 HSDPA2	≤ 23.5 dBm
UMTS Band 2 HSDPA3	≤ 23.5 dBm
UMTS Band 2 HSDPA4	≤ 23.5 dBm
UMTS Band 2 HSUPA1	≤ 23.5 dBm
UMTS Band 2 HSUPA2	≤ 23.5 dBm
UMTS Band 2 HSUPA3	≤ 23.5 dBm



UMTS Band 2 HSUPA4	≤ 23.5 dBm
UMTS Band 2 HSUPA5	≤ 23.5 dBm
UMTS Band 2 RMC	≤ 23.5 dBm
UMTS Band 4 HSDPA1	≤ 22 dBm
UMTS Band 4 HSDPA2	≤ 22 dBm
UMTS Band 4 HSDPA3	≤ 22 dBm
UMTS Band 4 HSDPA4	≤ 22 dBm
UMTS Band 4 HSUPA1	≤ 22 dBm
UMTS Band 4 HSUPA2	≤ 22 dBm
UMTS Band 4 HSUPA3	≤ 22 dBm
UMTS Band 4 HSUPA4	≤ 22 dBm
UMTS Band 4 HSUPA5	≤ 22 dBm
UMTS Band 4 RMC	≤ 22 dBm
UMTS Band 5 HSDPA1	≤ 25 dBm
UMTS Band 5 HSDPA2	≤ 25 dBm
UMTS Band 5 HSDPA3	≤ 25 dBm
UMTS Band 5 HSDPA4	≤ 25 dBm
UMTS Band 5 HSUPA1	≤ 25 dBm
UMTS Band 5 HSUPA2	≤ 25 dBm
UMTS Band 5 HSUPA3	≤ 25 dBm
UMTS Band 5 HSUPA4	≤ 25 dBm
UMTS Band 5 HSUPA5	≤ 25 dBm
UMTS Band 5 RMC	≤ 25 dBm
LTE Band 2	≤ 23 dBm
LTE Band 4	≤ 23.2 dBm